

PS
 XX
 CC 242265 to 243075 represent novel 5' expressed sequence tag (EST) sequences, corresponding to human secreted proteins. Y64651 to Y65540 represent the EST-related proteins corresponding to 242265 to 243075. The 5' ESTs can be used for producing secreted human gene products. They can be used to identify and isolate 5' untranscribed regions (UTR) and upstream regulatory regions which control the location, development stage, rate, and quantity of protein synthesis, as well as stability of mRNA. The ESTs are also useful as probes for chromosome mapping, a procedure to identify individuals, or in diagnostic procedures to identify individuals having genetic diseases resulting from abnormal gene expression. The products may also be used in gene therapy. The nucleic acids encoding signal peptides can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell. The proteins encoded by the EST sequences may be useful in treatment of a variety of human conditions. Secreted proteins have therapeutic value, and the identification of new secreted proteins is valuable. 242241 to 242264 and Y64644 to Y64650 represent sequences used in the exemplification of the present invention.

SQ Sequence 66 AA;

RESULT	2
ID	W62830 standard; Protein: 625 AA.
XX	W62830;
XX	27-OCT-1998 (first entry)
DT	
DE	Macadamia integrifolia antimicrobial protein.
KW	antimicrobial protein; infestation; control.
XX	
OS	Macadamia integrifolia.
XX	
FH	Key Location/Qualifiers
FT	Peptide 1..28
FT	/note= "signal peptide"
FT	Protein 29..666
FT	/note= "mature protein"
XX	
PN	W09827805-A1.
XX	
PD	02-JUL-1998.
XX	
PF	23-DEC-1997; 97WO-AU000874.
XX	
PR	20-DEC-1996; 96AU-0004275.
XX	
PA	(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX	
PI	Bower NI, Goultier KC, Green JL, Manners JM, Marcus JP;
XX	
DR	WPI: 1998-377279/32.
XX	
PT	Novel anti-microbial protein from e.g. Macadamia integrifolia - useful for controlling microbial infections of plants or mammals

Query Match 88.3%; Score 68; DB 21; Length 31;
 Best Local Similarity 64.3%; Pred. No. 43;
 Matches 18; Conservative 10; Mismatches 0; Indels 0; Gaps 0;

Qy 2 XXCXXCXXXXXXCXXXXCXXXXC 29
 :||:||||:||||:||||:|||
 Db 3 ccccccccccccccccccccccccc 30

RESULT 6
 R98208 DE Nucleotide used in production of MSH/MOMOLV chimeric sequence.
 XX DE Moloney murine leukaemia virus; gp70; 4070A retrovirus; retrovirus;
 KW 10A1 murine leukaemia virus; NZB-9-1 murine leukaemia virus;
 KW polytropic MX27 provirus; targetted drug delivery; gene therapy;
 KW single chain antibody; envelope protein; ss.
 XX OS Synthetic.
 OS PA (GEST) GENSET.
 XX PN WO9630504-A1.
 XX PD 03-OCT-1996.
 XX PF 22-MAR-1996; 96WO-US03908.
 PR 24-MAR-1995; 95US-0409648.
 XX PA (GENE) GENETIC THERAPY INC.
 (UYSC-) UNTIV SOUTHERN CALIFORNIA.
 XX PI Anderson W, Chiang YL, Januszkesi M, Mackrell AJ;
 PT Zhao Y;
 XX DR WPI; 1996455352/45.
 XX CC Cell-targetted retroviral vector particles - having envelope protein
 PT modified with targetting polypeptide
 XX Example 2: Page 36; 73pp; English.
 XX DR
 XX CC Cell targetted retroviral vector particles can be used in gene
 CC therapy to deliver a heterologous gene to a target cell for
 CC expression of a heterologous polypeptide in that cell. The cell
 CC targetted retroviral vector particles comprise an envelope protein
 CC which is modified to contain a targetting polypeptide (a single chain
 CC antibody), or in the case of moloney murine leukaemia virus
 CC (MOMLV), alpha melanotropin-stimulating hormone (MSH). Two
 CC oligonucleotides (R98207, R98208) were used to substitute sequences in
 CC MMLV for MSH sequences. This oligonucleotide was used to replace
 CC residues 680-888 of MOMLV envelope protein (See W04248).
 XX SQ Sequence 44 AA;

Query Match 88.3%; Score 68; DB 21; Length 44;
 Best Local Similarity 17.9%; Pred. No. 61;
 Matches 5; Conservative 23; Mismatches 0; Indels 0; Gaps 0;

Qy 2 XXCXXCXXXXXXCXXXXCXXXXC 29
 :||:||||:||||:||||:|||
 Db 13 tgcagaaggatataacctccatccc 40

RESULT 8
 Y35935 ID Y35935 standard; protein; 73 AA.

RESULT 7

► ▶ ▶

PR	03-FEB-1998;	98US-0074121.
PR	13-ARR-1998;	98US-0081563.
XX	10-AUG-1998;	98US-0096616.
PA	(GEST) GENSET.	
XX	Bouquelaret L, Ducleart A, Dumas Milne Edwards J;	
XX	DR WPI; 1999-347472/29.	
DR	N-PSDB; X97895.	
PT	Extended cDNAs encoding secreted proteins	
XX	Claim 7, Page 303; 307pp; English.	
CC	y3129-v36222 represent novel human secreted proteins encoded by the	
CC	extended cDNA sequences represented in X97813 X97906. The proteins	
CC	of the invention have cytostatic, thrombotic and osteopathic activity.	
CC	The extended cDNAs can be used to express secreted proteins or parts of	
CC	them or to obtain antibodies capable of binding to the secreted proteins.	
CC	They may also be used in diagnostic, forensic, gene therapy and	
CC	chromosome mapping procedures. Uses also include design of expression	
CC	vectors and secretion vectors.	
XX	Sequence 93 AA;	
SQ		
Query Match	88.3%	Score 68; DB 20; Length 93;
Best Local Similarity	17.9%	Score 68; DB 20; Length 93;
Matches	5; Conservative	Score 68; DB 20; Length 93;
Qy	2 XXXXXXXXAXXXXXXXCXXXCXXXC 29	Score 68; DB 20; Length 93;
Db	43 enothlctmnedekgfqccsfcgivc 70	Score 68; DB 20; Length 93;
RESULT	1 3	
ID	W56732 standard; Protein; 124 AA.	
XX		
AC	W56732;	
XX		
DT	29-JUL-1998 (first entry)	
XX		
DE	Nucleus specific NUC1 protein (ORF 1).	
XX		
KW	Endosperm; nucleus; END1; NUC1; promoter; foreign gene; pathogen;	
XX		
KW	grain disease resistance.	
XX		
OS	Hordeum vulgare.	
XX		
PN	W09808961-A2.	
XX		
PD	05-MAR-1998.	
XX		
PF	28-AUG-1997; 97WO-IB01037.	
XX		
PR	30-AUG-1996; 96US-0024886.	
XX		
PA	(DOAN/) DOAN D N.	
PA	(LINN/) LINNESTAD C.	
PA	(OLSE/) OLSEN O.	
XX		
PT	doan DN, LINNESTAD C, OLSEN O;	
XX		
DR	WPI; 1998-191229/17.	
DR	N-PSDB; V28500.	
PT	Plant endosperm specific genes END1 and NUC1 and their promoters -	
PT	expressed in endosperm and nucleoli, useful e.g. for foreign gene	
PT	expression to improve grain disease resistance or composition	
PS	Example 1; Page 25; 35pp; English.	
XX		
Query Match	88.3%	Score 68; DB 19; Length 124;
Best Local Similarity	17.9%	Score 68; DB 19; Length 124;
Matches	5; Conservative	Score 68; DB 19; Length 124;
Qy	2 XXXXXXXAXXXXXXXCXXXCXXXC 29	Score 68; DB 19; Length 124;
Db	43 cecirqcypacrdstppwckikcagsc 70	Score 68; DB 19; Length 124;
RESULT	1 4	
ID	R13329 standard; Protein; 125 AA.	
XX		
AC	R13329;	
XX		
DT	10-OCT-1991 (first entry)	
XX		
DE	HE4 epididymis-specific polypeptide.	
XX		
DE	Diagnosis; probe; infertility; immuno sterilisation; therapy.	
XX		
OS	Homo sapiens.	
XX		
FH	Key Peptide	Location/Qualifiers
FT	1.30	/label= sig_peptide
FT	Protein	31..125
FT		/label= mat_protein
XX		
PN	EP440321-A.	
XX		
PD	07-AUG-1991.	
XX		
PF	29-JAN-1991; 91EP-0250021.	
XX		
PR	30-NOV-1990; 90DE-4038189.	
PR	01-FEB-1990; 90DE-4002981.	
XX		
PA	(IHFH-) IHF INST HORMON FOR.	
XX		
PT	Iwell R, Kirchhoff C;	
XX		
DR	WPI; 1991-232030/32.	
DR	N-PSDB; Q13127.	
XX		
PT	Epididymis-specific DNA sequences - and correspong. polypeptides and	
PT	antibodies, useful for diagnosis or treatment of male infertility	
PT	or immuno-sterilisation	
XX		

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CC
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SQ
Sequence 125 AA:

Disclosure: page 16-17; 28pp; English.

DNA sequences have been identified by constructing a cDNA library from human epididymis RNA, screening with epididymis and testis probes, and further screening with brain and liver probes. The DNA mol. is useful in the cloning and expression of human epididymis-specific polypeptides in pro- or eukaryotic host cells. The polypeptides and antibodies to the peptides are useful for diagnosis or therapy of male infertility and for immunosterilisation of mammals.

Query Match Similarity 88.3%; Score 68; DB 12; Length 125;
 best Local Pred. 0.17e+02; Matches 5; Conservative 23; Mismatches 0; Indels 0; Gaps 0

Qy	2	XXCXXXCXXXXXXXXXXXXXXCXXXCXXXC	29
	3	:: :: :: :: :: :: :: :: :: :: :: ::	
Db	43	qncqtgecvsdsecadnlkccsagcatfc	70

RESULT 15
WB1779 TR WB1779 standard: protein: 125 AA

xxii *תולדות הפלמ"ח בפלשתינה*

RESULT 15
W81779
ID_W81779 standard; Protein: 125 AA.
XX
AC W81779;
XX
DT 23-FEB-1999 (first entry)

XX
KW HE4: epididymis-specific; diagnosis; male infertility; treatment;
KW sterility; immunostérilisation

20110825 - 1000

FH	Key	Location/Qualifiers
FT	Peptide	1..30
FT		/label= signal
FT	Protein	31..125

label = net
EP878544-A1.

PF 29-JAN-1991; 91EP-0250021

PR 01-FEB-1990; Y0BE-4002981

XX

WPI: 1998-585748/50

Disclosure: Page 16-17: 29pp: German

DISCLOSURE, PAGE 10 11, 2000, GERMANY.

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this condition demands a more human and objective view of the situation.

This sequence represents a novel human epididymis-specific protein, HE4

This sequence may be used for cloning and for expression of human

CC epididymis-specific polypeptides in prokaryotic or eukaryotic host

CC cells. Such proteins and antibodies generated from them may be used for

CC diagnosis of e.g. male infertility. The polypeptides and antibodies

can also be used for treatment of malignant and for diagnosis e.g. malignant tumours and antibodies

CC may also be used for treatment of malignant and for immunotherapy of mammals.